

=> fil reg; d que l2  
FILE 'REGISTRY' ENTERED AT 15:45:54 ON 12 JAN 2004  
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STRUCTURE FILE UPDATES: 9 JAN 2004 HIGHEST RN 635758-32-6  
DICTIONARY FILE UPDATES: 9 JAN 2004 HIGHEST RN 635758-32-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

L2 6 SEA FILE=REGISTRY ABB=ON CCCUUUAGUUUCUCUCGCUUUAGUGGGGUUAUUGGUC  
AGCAUCACACCACAAAAAGUCAUGCUGCCUUCUUUACAACCGUGAUCAUUCCAGCCAUGUU  
GGGGG|CCCCAACAAUGGCUGGAAUGAUCACGGUUGUAAAGAAGGCAGCAUGACUUUUUUGU  
GGUGUGAUGCUGACCAUAACCCACUAAAGCGAGAGAAACUAAAGGG/SQSN

*Seq 126 & its  
complement*

=> d rn cn sql kwic nte lc 1-6

L2 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 417995-53-0 REGISTRY  
CN GenBank AB057126 (9CI) (CA INDEX NAME)  
SQL 223

*= sequence length*  
SEQ 1 cccttttagtt tctctcgctt tagtgggggtt attggtcagc atcacaccac  
=====   
51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt  
=====   
101 gggggtatcg ctacaggtgc tgctgttaga acggtctcag ggcttcttgg  
=====

HITS AT: 1-105

LC STN Files: GENBANK

L2 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 392992-38-0 REGISTRY  
CN GenBank BD009535 (9CI) (CA INDEX NAME)  
SQL 105

SEQ 1 cccttttagtt tctctcgctt tagtgggggtt attggtcagc atcacaccac  
=====   
51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt  
=====   
101 ggggg  
=====

HITS AT: 1-105

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: GENBANK

L2 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 392992-37-9 REGISTRY  
CN GenBank BD009534\* (9CI) (CA INDEX NAME)  
SQL 105

```
SEQ      1 cccttttagtt tctctcgctt tagtgggggtt attgggtcagc atcacaccac
          =====
        51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt
          =====
        101 gggggg
          =====
HITS AT: 1-105
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\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: GENBANK

L2 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 385888-56-2 REGISTRY  
CN GenBank AJ390719\* (9CI) (CA INDEX NAME)  
SQL 105

```
SEQ      1 cccttttagtt tctctcgctt tagtgggggtt attgggtcagc atcacaccac
          =====
        51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt
          =====
        101 gggggg
          =====
HITS AT: 1-105
```

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: GENBANK

L2 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 251882-25-4 REGISTRY  
CN GenBank AJ390718\* (9CI) (CA INDEX NAME)  
SQL 105

```
SEQ      1 cccttttagtt tctctcgctt tagtgggggtt attgggtcagc atcacaccac
          =====
        51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt
          =====
        101 gggggg
          =====
HITS AT: 1-105
```

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: CA, CAPLUS, GENBANK, TOXCENTER

L2 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 206670-30-6 REGISTRY  
CN DNA (Helicobacter pylori clone N3001 vacA gene fragment) (9CI) (CA INDEX NAME)  
SQL 105

```
SEQ      1 cccttttagtt tctctcgctt tagtgggggtt attgggtcagc atcacaccac
          =====
        51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt
          =====
        101 gggggg
          =====
HITS AT: 1-105
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\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: CA, CAPLUS, USPATFULL

=> fil capl toxcenter uspatfull; s 12

FILE 'CAPLUS' ENTERED AT 15:46:29 ON 12 JAN 2004

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FILE 'TOXCENTER' ENTERED AT 15:46:29 ON 12 JAN 2004

COPYRIGHT (C) 2004 ACS

FILE 'USPATFULL' ENTERED AT 15:46:29 ON 12 JAN 2004

CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

L3 6 L2

=> dup rem l3

PROCESSING COMPLETED FOR L3

L4 5 DUP REM L3 (1 DUPLICATE REMOVED)

ANSWERS '1-3' FROM FILE CAPLUS

ANSWERS '4-5' FROM FILE USPATFULL

=> d ibib ab hitrn 1-5; fil hom

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2001:156517 CAPLUS

DOCUMENT NUMBER: 134:203312

TITLE: Expanding allelic diversity of *Helicobacter pylori* vacA. [Erratum to document cited in CA129:326775]

AUTHOR(S): van Doorn, Leen-Jan; Figueiredo, Ceu; Sanna, Ricardo; Pena, Salvador; Midolo, Peter; Ng, Enders K. W.; Atherton, John C.; Blaser, Martin, J.; Quint, Wim G. V.

CORPORATE SOURCE: Delft Diagnostic Laboratory, Delft, 2625 AD, Neth.

SOURCE: Journal of Clinical Microbiology (2000), 38(6), 2464  
CODEN: JCMIDW; ISSN: 0095-1137

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The following paragraph should be inserted at the end of Materials and Methods: "Nucleotide sequence accession nos. The nucleotide sequences of vacA have been deposited in the GenBank database under accession no. AJ390591 to AJ390744."

IT 251882-25-4, GenBank AJ390718

RL: PRP (Properties)

(nucleotide sequence; expanding allelic diversity of *Helicobacter pylori* vacA (Erratum))

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:156514 CAPLUS

DOCUMENT NUMBER: 134:203200

TITLE: Typing of *Helicobacter pylori* vacA gene and detection of cagA gene by PCR and reverse hybridization. [Erratum to document cited in CA129:90935]

AUTHOR(S): van Doorn, L, J.; Figueiredo, C.; Rossau, R.; Jannes, G.; van Asbroeck, M.; Sousa, J. C.; Carneiro, F.; Quint, W. G. V.

CORPORATE SOURCE: Delft Diagnostic Laboratory, Delft, Neth.

SOURCE: Journal of Clinical Microbiology (2000), 38(6), 2464  
CODEN: JCMIDW; ISSN: 0095-1137

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The following paragraph should be inserted at the end of Materials and Methods: "Nucleotide sequence accession nos. The nucleotide sequences of vacA and cagA genes have been deposited in the GenBank database under accession no. AJ390591 to AJ390744 and AJ269852 to AJ269897."

IT 251882-25-4, GenBank AJ390718

RL: PRP (Properties)

(nucleotide sequence; typing of Helicobacter pylori vacA gene and detection of cagA gene by PCR and reverse hybridization (Erratum))

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:256194 CAPLUS

DOCUMENT NUMBER: 128:304781

TITLE: Probes and primers for the vacA and cagA genes of Helicobacter and the diagnosis and prognosis of infection

INVENTOR(S): Quint, Wilhelmus; Van Doorn, Leendert-Jan

PATENT ASSIGNEE(S): Innogenetics N.V., Belg.; DDL B.V.; Quint, Wilhelmus; Van Doorn, Leendert-Jan

SOURCE: PCT Int. Appl., 122 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9816658	A2	19980423	WO 1997-EP5614	19971010
WO 9816658	A3	19980820		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9748669	A1	19980511	AU 1997-48669	19971010
AU 732099	B2	20010412		
EP 946747	A2	19991006	EP 1997-911215	19971010
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2001502536	T2	20010227	JP 1998-518004	19971010
US 2003165860	A1	20030904	US 2001-35978	20011221
US 2003175746	A1	20030918	US 2002-263594	20021002
PRIORITY APPLN. INFO.:			EP 1996-870131	A 19961016
			EP 1997-870133	A 19970909
			WO 1997-EP5614	W 19971010
			US 1999-284725	B1 19990416
			US 2000-531037	B1 20000320

AB Primers and probes for detection of alleles of the vacA and cagA genes of Helicobacter pylori that can be used in the diagnosis of the disease and in the typing of the strain involved for prognosis of infection are described. Similar probes and primers may be used for the detection of other virulence genes.

IT 206670-30-6

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nucleotide sequence, primers and probes derived from; probes and primers for vacA and cagA genes of Helicobacter and diagnosis and prognosis of infection)

L4 ANSWER 4 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2003:250960 USPATFULL  
TITLE: Probes, methods and kits for detection and typing of  
Helicobacter pylori nucleic acids in biological samples  
INVENTOR(S): Quint, Wilhelmus, Nootdorp, NETHERLANDS  
Van Doorn, Leendert-Jan, Ridderkerk, NETHERLANDS

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003175746	A1	20030918
APPLICATION INFO.:	US 2002-263594	A1	20021002 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-531037, filed on 20 Mar 2000, ABANDONED Division of Ser. No. WO 1998-EP9705614, filed on 23 Apr 1998, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1997-870133	19970909
	EP 1996-870131	19961016
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	66 Drawing Page(s)	
LINE COUNT:	4267	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method for the detection and/or typing of *Helicobacter pylori* (*H. pylori*) strains present in a sample including the steps of (i) amplifying the polynucleic acids of target regions of the *vacA* gene and the *cagA* gene, with suitable primer pairs, the primers being generally applicable on different *H. pylori* strains, where the target regions include a conserved region in the case of the *cagA* alleles and a variable region in the case of the *vacA* alleles; (ii) hybridizing the polynucleic acids obtained with a set of at least two VDG (virulence determinant gene)-derived probes, and with at least one of the probes hybridizing to a conserved region of a *cagA* of *H. pylori*, and with at least one of the probes hybridizing to a variable region of *vacA*; (iii) detecting the hybrids formed; and (iv) detecting and/or typing *H. pylori* strains present in a sample from the differential hybridization signals obtained. The present invention also relates to probes and primers for doing the same as well as *Helicobacter pylori* detecting/typing kits.

IT 206670-30-6

(nucleotide sequence, primers and probes derived from; probes and primers for *vacA* and *cagA* genes of *Helicobacter* and diagnosis and prognosis of infection)

L4 ANSWER 5 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2003:237703 USPATFULL  
TITLE: Probes, methods and kits for detection and typing of  
Helicobacter pylori nucleic acids in biological samples  
INVENTOR(S): Quint, Wilhelmus, Nootdorp, NETHERLANDS  
Van Doorn, Leendert-Jan, Ridderkerk, NETHERLANDS

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003165860	A1	20030904
APPLICATION INFO.:	US 2001-35978	A1	20011221 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-284725, filed on 16 Apr 1999, ABANDONED A 371 of International Ser. No. WO		

1997-EP5614, filed on 10 Oct 1997, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1996-870131	19961016
	EP 1997-96870133	19970909
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614	
NUMBER OF CLAIMS:	24	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	61 Drawing Page(s)	
LINE COUNT:	3996	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method for the detection and/or typing of *Helicobacter pylori* (*H. pylori*) strains present in a sample comprising the steps of: (i) if need be releasing, isolating or concentrating the polynucleic acids in the sample, (ii) amplifying the polynucleic acids of relevant target regions of the *vacA* gene and possibly other virulence determinant genes (VDG), with suitable primer pairs, said primers being generally applicable on different *H. pylori* strains, allowing to amplify said relevant target regions of the VDG preferentially in compatible amplification conditions; (iii) hybridizing the polynucleic acids obtained in (i) or (ii) with a set of at least two VDG-derived probes, under appropriate hybridization and wash conditions, and with at least one of said probes hybridizing to a conserved region of a VDG of *H. pylori*, and with at least one of said probes hybridizing to a variable region of *vacA*; (iv) detecting the hybrids formed in step (iii), (v) detecting and/or typing *H. pylori* strains present in a sample from the differential hybridization signals obtained in step (iv), with said typing being the allele-specific detection of a strain according to the VDG alleles present in that particular *H. pylori* strain, and the said virulence determinant genes being the genetic elements involved in enabling, determining, and marking of the infectivity and/or pathogenicity of said *H. pylori* strain. The present invention also relates to probes and primers for doing the same as well as *Helicobacter pylori* detecting/typing kits. The present invention also discloses novel sequences of VDG, which can be used for designing the above-mentioned primers and probes.

IT 206670-30-6

(nucleotide sequence, primers and probes derived from; probes and primers for *vacA* and *cagA* genes of *Helicobacter* and diagnosis and prognosis of infection)

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